

REMARKS

Claims 1-7 are pending in this application. By this Amendment, claims 1, 2, 4 and 5 are amended, and claims 6 and 7 are added. Reconsideration in view of the foregoing amendments and following remarks is respectfully requested.

The Office Action objects to claim 4. Claim 4 is amended to obviate the objection. Therefore, withdrawal of the objection is respectfully requested. Claims 1 and 2 are amended to correct informalities and/or for better clarity, but are not narrowed.

The Office Action rejects claims 4 and 5 under 35 U.S.C. §102(b) over JP 2001-080111A to Ishii. This rejection is respectfully traversed.

Claim 4 is amended to recite, *inter alia*, a controller that determines beam profiles of plural light-emitting element including a joint of light-emitting chips, and determines distance between the light-emitting elements at the joint of the light-emitting chips according to distance between peaks of the beam profiles. See Fig. 1, for example.

Ishii teaches supplying more current to some LED elements than to others, based on the distance between the pitch of the LED elements, but discloses nothing regarding beam profiles of plural light-emitting elements. Therefore, Applicants respectfully submit that claim 4 is patentably distinct from Ishii.

Claim 5 recites features similar to those of claim 4. Accordingly, claim 5 is also patentably distinct from Ishii.

Accordingly, withdrawal of this rejection is respectfully requested.

The Office Action rejects claims 1, 4 and 5 under 35 U.S.C. §102(b) over JP 08-118722A to Sawada. This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, that beam profiles of plural light-emitting elements including a joint of light-emitting chips are determined, and that distance between the light-

emitting elements at the joint of the light-emitting chips is determined from the distance between peaks of the beam profiles.

The Office Action alleges that paragraphs [0033] and [0034] teach these features. However, in these paragraphs, Sawada merely teaches to increase and decrease gate voltage VG for the first sub-transistor 2 to eliminate white and black stripes based on the pitch P. Sawada does not teach or suggest determining beam profiles of the plural light-emitting elements including a joint of the light-emitting chips, and determining distance between the light-emitting elements at the joint of the light-emitting chips from distance between peaks of the beam profiles, as recited in claim 1. Accordingly, Applicants respectfully submit that claim 1 is patentably distinct from Sawada.

Claims 4 and 5 recite a controller that determines beam profiles of plural light-emitting element including joints of light-emitting chips, and determines distance between the light-emitting elements at the joints of the light-emitting chips according to distance between peaks of the beam profiles. As with claim 1, Sawada does not teach or suggest this feature, and therefore, claims 4 and 5 are patentably distinct from Sawada.

Accordingly, Applicants respectfully request withdrawal of this rejection.

The Office Action rejects claims 1-4 under 35 U.S.C. §102(e) over U.S. Patent Publication No. U.S. 2004/0008247 to Masuda. This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, that beam profiles of plural light-emitting elements including a joint of the light-emitting chips are determined, and that distance between the light-emitting elements at the joint of the light-emitting chips is determined from the distance between peaks of the beam profiles.

Masuda, on the other hand, teaches to first determine the width of the vertical-line intervals to determine the distance between the light emitting devices 3 on the edges of adjacent light emitting device array chips 2. The width of the vertical-line interval is not the

distance between peaks of the beam profiles. That is, the width may be different depending on the intensity of the light emitting devices. Therefore, Masuda does not teach or suggest determining beam profiles of the plural light-emitting elements, or determining the distance between the light-emitting elements at the joints of the light-emitting chips from the distance between peaks of the beam profiles of the light emitting elements. As such, Applicants respectfully submit that claim 1 is patentably distinct from Masuda.

Claim 2 recites, *inter alia*, that the beam profiles of plural light-emitting elements including a joint of the light-emitting chips is determined, that the beam profiles are sliced at a predetermined level, and that the distance between the light-emitting elements at the joint of the light-emitting chips is determined from the distance between median points of the sliced plane.

In contrast, Masuda uses a threshold value and points of exposure intensity distribution intersecting the threshold value to determine exposure widths as shown in Fig. 9, for example. Masuda does not teach or suggest the use of median points of the sliced plane to determine the distance between the light-emitting elements at the joints of the light-emitting chips. As such, Applicants respectfully submit that Masuda does not teach or suggest the features of claim 2. Therefore, Applicants respectfully assert that claim 2 is patentably distinct from Masuda.

Claim 3 is allowable at least for its dependence on allowable claim 1, as well as for the additional features it recites.

Claim 4 recites a controller that determines beam profiles of plural light-emitting element including a joint of light-emitting chips, and determines distance between the light-emitting elements at the joint of the light-emitting chips according to distance between peaks of the beam profiles. As with claim 1, Masuda does not teach or suggest this feature, and therefore, claim 4 is patentably distinct from Masuda.

At least for these reasons, Applicants respectfully request withdrawal of this rejection.

The Office Action rejects claim 3 under 35 U.S.C. §103(a) over Masuda in view of Ishii. This rejection is respectfully traversed.

Ishii fails to overcome the deficiency of Masuda with respect to claim 1. Therefore, claim 3 is allowable at least for its dependence on allowable claim 1, as well as for the additional features it recites. Therefore, withdrawal of this rejection is respectfully requested.

New independent claims 6 and 7 recite that a controller determines beam profiles of plural light-emitting elements including light emitting elements at a joint of the light-emitting chips, and determines distance between the light-emitting elements at the joint of the light-emitting chips according to distance between median points of sliced plane made by slicing the beam profiles at a predetermined level. This feature is recited in the specification at, for example, page 15, lines 13-24. None of the applied art teaches or suggests this feature. Accordingly, claims 6 and 7 are allowable.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-7 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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